

*Full Rocket*  
*Leaflet* **CONFIDENTIAL**

50X1

PROGRESS REPORT

FOR

FEBRUARY 1956

ON

4-INCH ROCKET

ORIGINAL CL BY 235919  
☐ DECL ☒ REVW ON 2410  
 EXT BYND 6 YRS BY 3 & SAME  
 REASON 3 & (3)

DOC <u>770</u>	REV DATE <u>29 MAY 1980</u>	BY <u>018373</u>
ORIG COMP <u>56</u>	GPI <u>56</u>	TYPE <u>03</u>
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JUST <u>22</u>	NEXT REV <u>2010</u>	AUTH: HR 10-2

1210-E-1

*logged*  
*2 Apr 56*

March 23, 1956**CONFIDENTIAL**

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A continuing effort was made during February to redesign the multitube rocket head so that adequate pressure equalization could take place. An aluminum model was flown similar to that described in the January report. Two of the tubes broke off in flight due to weakening because of the increased size of the cross bored hole.

It was felt by all concerned that the multitube model cannot be successfully made under present time and money requirements. Preliminary tests on a single tube finned rocket indicate that it may substantially fulfill the requirements as to payload and range. Models were fabricated and flown to study various design parameters. Three additional models were made for a range of 2,000 feet. They were 3" in head diameter, 20" in length, with 8" powder grains and carbon nozzles. All three flew 2,100  $\pm$  25 feet and were within  $\pm$  100 feet of the target center.

#### Future Work

Work will be intensified on the single tube models. The simulated payload will have its weight and size as near as possible to that desired. Preliminary studies indicate that an increased fin area for a larger diameter head is necessary. Various fin designs will be tested to provide maximum stability for this model.

#### Financial Statement

Total Amount of Contract (Phase II)

Obligations for February, 1956

Obligations to February 29, 1956

Balance of Contract



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The expenditure rate for February reflects increased effort for the month and a return of the  withheld in the report of October, 1955.

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Expiration Date - February 1, 1956. Extension in time requested.